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DevOps Hiring



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by Dave Zwieback

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DevOps Hiring

DevOps Hiring Versus Hiring DevOps

In early 2013, I gave a short talk at devopsdays in New York about hiring in a DevOps world.¹ The main point of the talk was that organizations that have embraced DevOps needed people who would naturally resist organizational silos. One way to identify these rare individuals (a.k.a. polymaths, generalists, or comb-shaped people) was by their non-linear career paths and wide-ranging interests. I also shared some practical suggestions for finding such people (e.g., not on LinkedIn).

When I revisited the subject for this report, I realized that the approach I used for recruiting DevOps people was fundamentally different from traditional recruiting. In this paper, I describe a more effective model for finding, hiring, and retaining non-commodity talent in ultra-competitive markets—*DevOps hiring*. This holistic approach to recruiting is based on core DevOps principles and can be used to hire for in-demand positions in any part of an organization. It's based on my personal experience with implementing DevOps hiring at a quickly growing software company in New York City.

Before delving into DevOps hiring and its benefits, let's briefly review current recruiting practices.

1. "On Hiring in a DevOps World"

Hello, <name>

My name is [REDACTED], I'm a recruiter for [REDACTED]. I came across your profile and I'd like to speak with you regarding an exciting opportunity with [REDACTED]! They currently have a need for a DevOps Engineer and based on your profile, it looks to be a great fit! I would value the chance for us to speak in detail. What is the best time and number to reach you at to discuss this position in detail? Thanks again for your time and if you know of anyone else that may be in need of assistance, I would love to chat with them too.

All the best,

[REDACTED]

Experienced engineers (or those pretending to be experienced engineers)² receive emails like these on a daily basis.³ Mostly originating on LinkedIn, these messages are spam—low-cost, impersonal, and widely distributed without much hope of a response. (In an informal poll of recruiters, the most optimistic estimates for the response rates for LinkedIn emails barely reach 20%, and these estimates are usually followed with “I haven’t measured in a while.”)

These unsolicited emails are one reason that some engineers have deleted their LinkedIn profiles. More important, the emails betray a recruiting business model that shares more with selling counterfeit sildenafil citrate than finding the perfect role for a perfect candidate.

This approach is also unsustainable given the current state of the IT job market. As of the first quarter of 2013, the unemployment rate in IT-related fields in the US dropped to 3%,⁴ even falling below 2%⁵ for software developers and other in-demand roles—well below the 4% level that is considered “full employment.” This is excellent news for experienced IT professionals, who can expect both a wider range of opportunities and better compensation. However, it presents a real challenge for hiring managers, many of whom have jobs that go un-

2. “the recruiter honeypot”
3. “the best recruiters — followup”; “Shit recruiters say”
4. “Labor Force Statistics from the Current Population Survey”
5. “Skills gap creating candidate shortfall”

filled for months or years. (In fact, about half of US employers are having difficulty filling jobs.)⁶

Recruiting: A Broken Model

Hiring managers often rely on external recruiters (a.k.a. headhunters) to improve the recruiting pipeline—a pool of qualified candidates for a particular role. These recruiters are typically compensated by the hiring company with a percentage of the candidate's first-year salary (10–30%), payable after three to six months of employment. Although external recruiters' incentives appear on the surface to be aligned with the hiring managers' (i.e., fill the job opening as quickly as possible!), they diverge in two areas. First, external recruiters may be motivated to either inflate the candidate's salary to get a larger fee (which is bad for the company), or deflate the candidate's salary to close the deal more quickly (which is bad for the candidate). Second, taken to the extreme, the external recruiters' business model favors short-term profit over long-term outcomes—i.e., candidates who survive at the new job just long enough for the recruiter to receive the finder's fee before being placed at another company shortly thereafter.

To be clear, these are not criticisms of any external recruiter personally, but simply an observation that the current business model puts them at odds with both the company and the candidate. It's important to keep these conflicts of interest in mind when working with external recruiters, either as a candidate or as a hiring manager.

The incentives of internal recruiters (who typically work in HR departments) are more aligned with those of companies—most *are* concerned with the long-term success of hires well beyond the initial three to six months. However, because they also deal with myriad regulatory and compliance issues related to personnel, they often approach recruiting from a risk-management perspective and focus on finding reasons for rejecting qualified candidates. Internal recruiters are also often constrained by salary benchmarks, which can be disconnected from the value that the candidate brings to the company.

As a result, the candidate, recruiters, and hiring manager typically find themselves in silos, with distinct goals:

6. "2012 Talent Shortage Survey"

Candidate	External recruiter	Internal recruiter/HR	Hiring manager
Maximize salary	Maximize own revenue (e.g., by either minimizing or maximizing candidate salary)	Minimize salary + recruiting costs; match salary benchmarks	Maintain salary parity within the team; maximize candidate value to the organization
Maximize impact	Maximize own revenue	Minimize risk	Maximize team/company success

DevOps is at its core a cultural movement to remove unnatural and dysfunctional silos, and its principles—the four pillars of Culture, Automation, Measurement, and Sharing—can be applied to building a hiring process that emphasizes a common goal for all the participants.

Toward a Common Goal: A Culture of Engagement

The first step in breaking down the silos that keep candidates, recruiters, and hiring managers focused on divergent outcomes is identifying a common goal. Luckily, all three groups share the desire to be—and to employ or work with—highly productive and engaged workers. A culture of engagement is a key component of DevOps hiring.

Employee engagement is “the extent to which employees commit to something or someone in their organization and how hard they work and how long they stay as a result of that commitment.”⁷ According to a 2004 analysis by the Corporate Leadership Council, employee engagement accounts for about 40% of observed performance improvements. Sadly, a Gallup survey, which covered 24 million workers worldwide, found that *at most* 30% of the US workforce is “actively engaged in their work.”⁸

The level of employee engagement is one of the key elements that enables teams and companies to achieve both higher performance and retention. Engagement is part of company culture, and a clear competitive advantage. Highly engaged teams operate from a deeply held belief that each individual possesses a unique set of strengths and that the role of management (and other members of the team) is to help identify these strengths and support individuals in developing and

7. Corporate Leadership Council, *Driving Performance and Retention Through Employee Engagement*, 2004

8. “The New Bill of Rights for All Students”

applying them every day. That is, instead of largely focusing on remediating weaknesses, high-performance organizations embrace and emphasize their strengths and follow Jesse Robbins' (the cofounder of Opscode) rule to "Make More Awesome!"⁹

Identifying Strengths

More specifically, there are three main factors that increase employee engagement:

- Having someone (e.g., a manager) care about employee development
- Employees doing what they like to do each day
- Employees doing what they're best at every day

The last two factors are strongly related to individual strengths—people naturally like doing what they're good at and are good at doing the things they like. Both individuals and managers can use tools such as Gallup's StrengthsFinder to help identify and describe individual strengths, as well as create a team's overall strengths map. StrengthsFinder in particular is based on a 40-year study of human strengths,¹⁰ and while it does not directly measure experience or technical skill, it can quickly assess fundamental strengths in four broad categories: executing, influencing, relationship building, and strategic thinking.

Automation: Finding "Dark Pools" of Candidates

Most of the world's recruiting pipeline currently comes from LinkedIn. This is reflected in the fact that more than half of LinkedIn's revenue comes from "Talent Solutions"—a product that enables recruiters to identify and contact candidates. As of early 2013, LinkedIn had reached over 200 million members (74 million in the US),¹¹ which certainly makes it the largest "professional" social network. However, compare this number with Facebook's 1.1 billion monthly active

9. "Hacking Culture at VelocityConf"

10. "The Research Behind StrengthsFinder 2.0"

11. "200 Million Members!"

users¹² or Twitter's 288 million monthly active users¹³ to get a sense of magnitude for a valuable pool of candidates that is missing from LinkedIn, and therefore from most recruiters' view. There are also smaller, more focused social networks (e.g., Hacker News or GitHub) whose populations are likely underrepresented on LinkedIn. Being able to identify candidates outside LinkedIn—in the “dark pools” of candidates—is a competitive advantage.

Although searching these dark pools still requires considerable manual effort, there are several services, such as **TalentBin**, **Entelo**, and **Gild**, that collect and organize information from multiple sources (e.g., blogs, Twitter, GitHub, Quora, etc.) in order to present a fuller picture of potential candidates and to identify candidates who are not on LinkedIn.

One of the most powerful methods of identifying qualified candidates is through employees' immediate personal and professional networks. Many companies offer referral bonuses, and increasing the amount of such incentives (e.g., to \$10,000 or more) often results in quickly filling even the most hard-to-fill openings. However, depending on the types or amount of open positions, personal networks may be insufficient or become depleted. Encouraging all team members (not just hiring managers) to expand their professional networks—for example, by making it a stated goal for all team members to speak to at least 10 engineers about the company per year—is an effective way to increase the pool of qualified candidates.

Finally, presenting at conferences, hosting meetups, blogging, or contributing to open source projects are all effective methods for both increasing your team or company's visibility for potential candidates and identifying dark pools of candidates.

Don't Automate All the Things

While people may join a company because they are excited by the challenges, identify with the company mission, or are enticed by company benefits and perks, how long they will stay and how productive they'll be is directly related to the level of their engagement. As we've seen above, employee engagement is primarily a reflection of the qual-

12. <http://tcrn.ch/1gynXHs>

13. “Twitter Now the Fastest Growing Social Platform in the World”

ity of management and the strength of the person's relationship with his manager.

It's a well-known saying that "people leave [bad] managers, not companies,"¹⁴ but it's also true that people join (and stay at) companies because of great managers. Great managers excel at engaging both their current and prospective employees. That is, engagement starts well before the person is hired, and the candidate's first interaction with the company is crucial. An email direct from the hiring manager that not only introduces the company and the role but also refers to a candidate's blog or social media posting, contributions to open source software, or participation in specific meetups and that details how the candidate's apparent skills and interests would be applied and how her career might progress over the next three to five years is a great first step in establishing a long-term relationship with the candidate.

Conducting candidate research and crafting such highly personalized emails is time consuming, but it will be significantly more effective than any automated or non-personalized message. In fact, during my search for experienced systems engineers, I have achieved a response rate of 96% ($n = 72$). In contrast, the traditional recruiter approach (i.e., LinkedIn searches and job board postings) produced no viable candidates in over six months. In addition, by investing in preliminary research, I reached out only to the people who I thought would be a great fit for the role. To even get the same number of responses, a typical recruiter would have to spam almost 350 candidates on LinkedIn (assuming the overly optimistic 20% response rate).

Measurement and Metrics

Another key DevOps attribute that can be applied to hiring is the emphasis on measurement and metrics. Recruiters and hiring managers typically track the number of prospective candidates "in the pipeline," the length of time from first contact to hiring decision, how long positions stay open, the ratios of interviewees to hires, and so on. These metrics are attractive in part because they're limited in scope, easy to measure, and relatively easy to influence. They're also at best proxies for important business metrics (e.g., profitability), and at worst, can be used through incorrect analyses to establish illusory causation or correlation. For example, measuring the response rate to the initial

14. "People leave managers, not companies"

email from the hiring manager may be interesting, but does improving the response rate actually result in hiring better-qualified people faster—or, more important, does it influence critical business outcomes like customer satisfaction?

Similarly, although one of the explicit goals of DevOps hiring is optimizing for long-term employee engagement, measuring employee engagement via qualitative surveys may not be necessary. A large meta-analysis study of 7,939 business units in 36 companies established correlation between higher employee engagement and increased customer satisfaction, productivity, profit, and reduced employee turnover.¹⁵ Instead of finding easy-to-influence local metrics (e.g., time to hire) or measuring proxy metrics (e.g., employee engagement), the DevOps approach strongly favors identifying direct, global metrics that support optimization for the whole (e.g., productivity of the entire organization). Directly measuring and focusing on improving these critical business metrics helps orient the entire company toward improving the right business outcomes.

Sharing

Sharing both the successes (best practices, open source tools) and failures (postmortems), often publically, is one of the hallmarks of the DevOps movement. In contrast, sharing candidates between organizations is rare. Given the difficulty of finding capable candidates, and maxims such as the “war for talent” and “talent is a competitive advantage,” it’s not surprising that most recruiters and hiring managers hoard candidates, even those whom they won’t be hiring.

In reality, there are many excellent reasons for hiring managers to introduce candidates—with their permission, of course—to other organizations: it clearly demonstrates that the hiring manager prioritizes the candidate’s long-term fulfillment and engagement instead of short-term need to fill a role. It also builds long-term relationships with other hiring managers, who are likely to reciprocate the sharing.

In addition, I encourage employees to interview at other organizations several times a year and will personally make introductions within my

15. Harter, James K., Frank L. Schmidt, and Theodore L. Hayes. “Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis.” *Journal of Applied Psychology* 87, no. 2 (April 2002): 268-279, doi: 10.1037/0021-9010.87.2.268.

network. It has the same effects as above for current employees, with the additional benefit of bringing back good ideas from other organizations. Furthermore, it is consistent with the fact that most in-demand employees are—or should be—proactively interviewing, even if they're happy in their current jobs.

Despite best intentions, hiring does not always go well, or there may be other reasons (e.g., changing business conditions) that an employee must be let go. While employee separation is never easy, approaching it from a perspective of maximizing employee long-term engagement unites the employee, the hiring manager, and the recruiter (or HR) behind a common goal. That is, once it's clear that an employee does not have an opportunity to achieve maximum engagement at the current company, everyone involved will realize that she should seek a better “fit” elsewhere. This approach reduces (but clearly does not eliminate) the negative feelings associated with staff reduction, and it helps preserve the long-term relationship between the employee and the hiring manager. It also frees the hiring manager and others at the company to help the dismissed employee find a role where her engagement would be higher by introducing her within their networks. Finally, just like service outages, hiring mistakes are rich learning opportunities, which are best uncovered by conducting in-depth, blameless postmortems with all those involved in the hiring decision and sharing the results as widely as possible.

Conclusion

DevOps is an effective method for eliminating unnecessary silos within organizations. Traditional recruiting approaches fail to identify and prioritize a common, long-term goal for the candidate, the recruiter, and the hiring manager. DevOps hiring addresses this by emphasizing a common goal (employee engagement) and further applying the core DevOps components of Culture, Automation, Measurement, and Sharing to recruiting. Although DevOps hiring is almost certainly required to identify qualified IT candidates for organizations who've embraced the DevOps philosophy, it can also be effective at finding candidates in any competitive field.

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